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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,054	06/24/2003	Dae-Ho Choo	61920219D1	1023

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F. CHAU & ASSOCIATES, LLC
130 WOODBURY ROAD
WOODBURY, NY 11797

EXAMINER	
RUDE, TIMOTHY L	
ART UNIT	PAPER NUMBER
2871	

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/602,054	CHOO ET AL.	
	Examiner	Art Unit	
	Timothy L. Rude	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-32 and 56* is/are pending in the application.

4a) Of the above claim(s) *21-32* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-20 and 56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20060918*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Per Pre-Appeal Brief Review mailed 17 July 2006, the Final Rejection mailed 28 February 2006 is vacated.

Election/Restrictions

This application contains claims 21-32 drawn to an invention nonelected with traverse in Paper No. 200401115 and 20040520. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Objections

1. On page 3 of the response filed 06 December 2005 Applicant made the admission that the 10 June 2005 amendment to claim 1 does not result in an independent or distinct invention under MPEP 802.01. Please compare Applicant's prior admissions filed 20 May 2004, pages 3-5.

Since applicant clearly admitted on the record that the species are not patentably distinct, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Claim 1 is presently objected to because of the following informalities: Upon further consideration it is apparent that newly added recitations of "a sealant heat-treating unit ..." are drawn to non-elected invention VI. Examiner anticipates removal of these recitations and will examine the claim as not drawn to non-elected invention VI. Appropriate correction is required. Please note that claim 1 previously had (and presently has) other recitations drawn to non-elected inventions, but as a courtesy, examiner examined those recitations in the interests of compact prosecution. Please comply with Applicant's election of 20 May 2004 in response to restriction requirement of 15 December 2003 whenever filing amendments to claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 2, 4-20, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasumi et al (Kawasumi) USPAT 5,978,065 in view of Adachi, Japanese patent application publication JP 56114928 A.

As to claim 1, Kawasumi discloses (Figures 1A-3B) apparatus and a method for manufacturing liquid crystal displays (entire patent, background of the invention, and especially col. 5, line 13 through col. 7, line 14), comprising: applying sealant on one of two substrates of a mother glass, the mother glass having at least one liquid crystal cell (col. 5, lines 14-37) [inherently requires Applicant's sealant applying unit, even if it is manual], a substrate-attaching unit, 5 and 7, conjoining substrates in a vacuum (background, suitable though more costly method – affords better degasification of liquid crystal material). Please note numerous references teach these steps/apparatus.

FIG. 1A

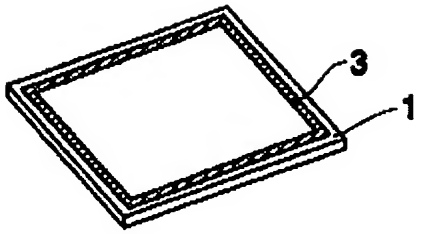


FIG. 1B

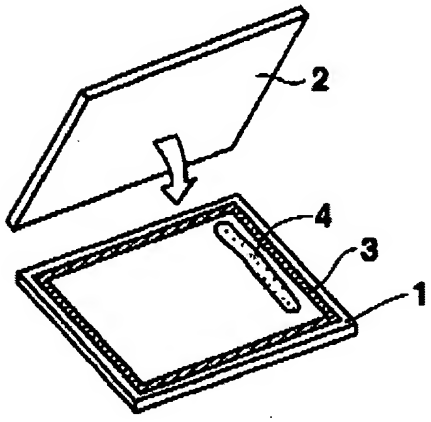


FIG. 1C

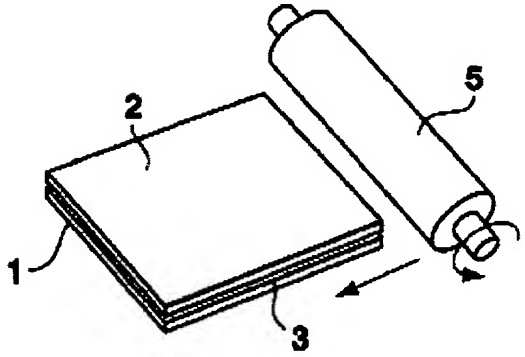


FIG. 2

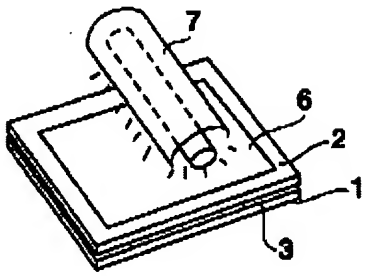


FIG. 3A

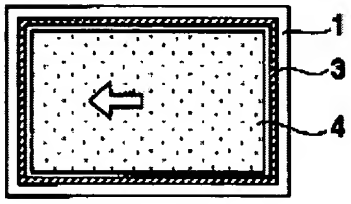
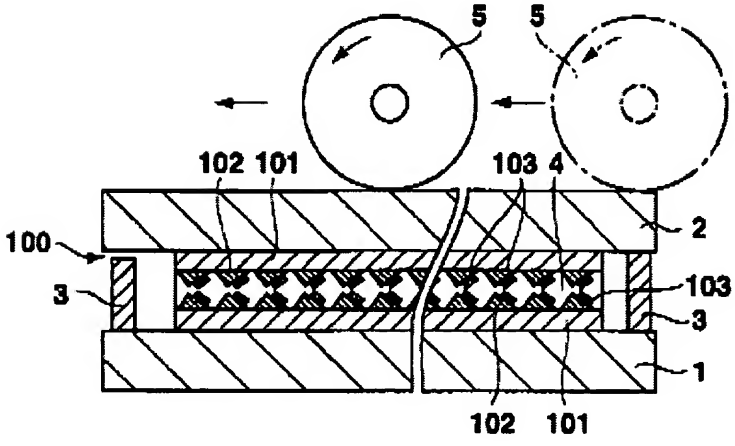
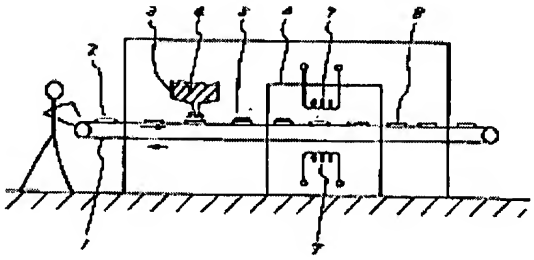


FIG. 3B



Kawasumi does not explicitly disclose the use of an in-line conveying unit.

Adachi teaches the use of a belt conveyor to provide a cleaner environment for the operators.



Adachi is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add the use of a belt conveyor to provide a cleaner environment for the operators.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD system of Kawasumi with the belt conveyor of Adachi to provide a cleaner environment for the operators.

As to claims 2, 4-20, and 56, Kawasumi in view of Adachi as combined above discloses the apparatus of claim 1, above. The added limitations of claims 2-20 and 56 are drawn to inventions of an in-line system that are not patentably distinct per Applicant's admission in Paper No. 20040520 [remarks filed 20 May 2004, top of pages 3 and 5]. Therefore claims 2-10 and 56 are rejected on the bases that they are not patentably distinct from rejected base claim 1.

3. Rejection of claims 1, 2, 4-20, and 56 under 35 U.S.C. 103(a) as being unpatentable over Kawasumi et al (Kawasumi) USPAT 5,978,065 in view of Ogawa USPAT 6,680,759 B2 is withdrawn.

Response to Arguments

Applicant's arguments filed on 06 December 2005 have been fully considered but they are not persuasive.

Applicant's ONLY substantive arguments are as follows:

(1) Objection to claim 1 should be withdrawn because added limitations are not patentably distinct. Claim 1 was amended 10 June 2005 to merely add limitations drawn to the elected in-line convey unit and to add the limitations of canceled claim 3.

(2) Ogawa is after Applicant's priority date, and an English translation is provided.

(3) Kawasumi and Adachi fail to teach a sealant heat-treating unit forming a reaction-prevention layer on a surface of the sealant to prevent a reaction between the sealant and a liquid crystal material.

(4) Dependent claims are allowable because they directly or indirectly depend from an allowable base claim.

Examiner's responses to Applicant's ONLY arguments are as follows:

(1) It is respectfully pointed out that since applicant clearly admitted on the record that the species are not patentably distinct, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention. However, regardless of Applicant's admissions, the applied prior art does disclose Applicant's claim limitations.

(2) It is respectfully pointed out that rejections bases upon Ogawa are withdrawn.

(3) It is respectfully pointed out that Applicant has made the omission that the amended claim 1 limitations of a sealant heat-treating unit forming a reaction-prevention layer on a surface of the sealant to prevent a reaction between the sealant and a liquid crystal material are not patentably distinct from the original claim 1. Claim 1 remains rejected because Applicant's admission was used in a rejection under 35 U.S.C. 103(a) of the other invention. However, regardless of Applicant's admissions, the applied prior art does disclose Applicant's claim limitations.

(4) It is respectfully pointed out that in so far as Applicant has not argued rejection(s) of the limitations of dependent claim(s), Applicant has acquiesced said rejection(s).

Any references cited but not applied are relevant to the instant Application. Korean publication 100487258 B1 provided in IDS filed 18 September 2006 is considered relevant to the instant Application.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Timothy L Rude
Examiner
Art Unit 2871

tlr

ANDREW SCHECHTER
PRIMARY EXAMINER